

Work Order ID 136261

Friday, August 28, 2015 2:17:53 PM

136261

Page 1

Item ID: D2938-1

Accept

N900040100Setup Start ***NS1***

Revision ID:

Stop ***NS2***

Item Name: Saddle LH Out, 206

Start Date: 8/28/2015 Start Qty: 6.00

6

Cust Item ID:

Required Date: 8/28/2015 Req'd Qty: 6.00

6

Customer:

Reference:

Approvals: Process Plan: SH/LLDate: 0150901

Tooling:

Date:

QC:

Date:

SPC (Y/N):

Date:

Run Start ***NR1***Stop ***NR2***

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
--------------------------------	--------------------------	----------------------	---------	--------	--------------	---------------	---------------	------------------	----------------

Draw Nbr

Revision Nbr

D2938

Rev C

100

0.00

100

HAAS CNC VERTICAL MACHINING #1

HAAS 1

Memo

0.08

HAAS CNC vertical machine #1

Program part number and batch number.1-Inspect part number and batch number are programmed correctly.2-Machine Step No 1 of Folio and visually inspect as per dwg D2938 & attached Dimension Sheet 3-Machine Step No 2 of Folio and visually inspect as per

DAS
14
9-89

15/09/21

110

0.00

110

CONVENTIONAL MILLING MACHINE

Mill Conv

Memo

0.01

Conventional Milling Machine

Machine Keyway and inspect per attached dimension sheet

DAS
14
9-89

15/09/21

120

0.00

120

QC1- Inspection performed by CMM

QC

Memo

0.00

Quality Control

15/09/30

DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____		DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐		AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐																																																													
Date :		Step #:		QTY Effective :			MRB (QSI042) Approval																																																										
Description Work Order Deviation				Disposition				Completed By																																																									
								Lead hand / Supervisor Approval Verification																																																									
								QC / QA Coordinator Approval																																																									
Root Cause		FAULT CATEGORY																																																															
Environment ☐	No Re-verification ☐	Pressure/Forced ☐	Temperature/Cure ☐	Power Loss/Surge ☐	Positioned Wrong ☐	Design ☐	Operator ☐	Bending ☐	Set-up ☐	Folio/Program ☐	Outside Dimensions ☐	Doc/Data ☐	Offset/Setup ☐	Centre Not Concentric ☐	BOM/Route ☐	Grain ☐	Over/Under tolerance ☐	Equip/Tooling ☐	Supplier ☐	Cracks ☐	Broken/Damage/Defect ☐	Weld ☐	Part Incorrect ☐	Handling/Pre ☐	Training ☐	Crimp/Kink/Ripple/Wave ☐	Inspection Incomplete/Unqualified ☐	Wrong Stock Pulled ☐	Part Lost/Missing ☐	Material ☐	Use for Testing ☐	Cuffs ☐	Contamination ☐	Out of Sequence ☐	Part Moved ☐	Internal Transport ☐	Poor Information ☐	Crushing ☐	Countersink ☐	Off-set ☐	Drawing ☐	Tribal Knowledge ☐	Rushing ☐	Heat Treat ☐	Cut Too Short ☐	Mislabeled ☐	Finish ☐	LOA ☐	Product Improvement ☐	Wave/Twist in Tube ☐	Instructions Incomplete/Unclear ☐	Fit/Function ☐	Misread ☐	Substation ☐	Process Improvement ☐	Marks/Chatter ☐	Drill Holes ☐	Misaligned/off center ☐	Turning Sequence ☐	Past Expiry Date ☐	Manufacturing Process ☐	OTHER : _____			
Misidentified ☐	Past Due ☐																																																																

Work Order ID 136261

Friday, August 28, 2015 2:17:53 PM

136261

Page 2

Item ID: D2938-1 Accept ***N900040100*** Setup Start ***NS1***
 Revision ID: Stop ***NS2***
 Item Name: Saddle LH Out, 206
 Start Date: 8/28/2015 Start Qty: 6.00 ***6*** Cust Item ID:
 Required Date: 8/28/2015 Req'd Qty: 6.00 ***6*** Customer:
 Reference:

Approvals: Process Plan: _____ Date: _____ Tooling: _____ Date: _____ Run Start ***NR1***
 QC: _____ Date: _____ SPC (Y/N): _____ Date: _____ Stop ***NR2***

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
130	QC8- Inspect parts - second check	0.00							DAS 08 9-89
130									
QC	Memo	0.00							
Quality Control									
140	Chemical Conversion Coat per QSI005 4.1	0.00							DAS 08 9-89
140									
HandFinish	Memo	0.01							
Hand Finishing									
150	White Gloss(Ref:4.3.5.1) per QSI005 4.3-Alum	0.00							DAS 08 9-89
150									
Powdercoat	Memo	0.00							
Powder Coating	START TIME: <u>11:10.</u> OVEN TEMPERATURE: FINISH TIME: <u>11:40.</u>								

DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____		DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐		AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐					
Date :		Step #:		QTY Effective :			MRB (QS1042) Approval Completed By Lead hand / Supervisor Approval Verification QC / QA Coordinator Approval		
Description Work Order Deviation				Disposition					
Root Cause Environment ☐ Design ☐ Doc/Data ☐ Equip/Tooling ☐ Handling/Pre ☐ Material ☐ Internal Transport ☐ Tribal Knowledge ☐ LOA ☐ Substation ☐ Past Expiry Date ☐ Misidentified ☐ No Re-verification ☐ Operator ☐ Offset/Setup ☐ Supplier ☐ Training ☐ Use for Testing ☐ Poor Information ☐ Rushing ☐ Product Improvement ☐ Process Improvement ☐ Manufacturing Process ☐ Past Due ☐		FAULT CATEGORY Pressure/Forced ☐ Bending ☐ Centre Not Concentric ☐ Cracks ☐ Crimp/Kink/Ripple/Wave ☐ Cuffs ☐ Crushing ☐ Heat Treat ☐ Wave/Twist in Tube ☐ Marks/Chatter ☐ Temperature/Cure ☐ Set-up ☐ BOM/Route ☐ Broken/Damage/Defect ☐ Inspection Incomplete/Unqualified ☐ Contamination ☐ Countersink ☐ Cut Too Short ☐ Instructions Incomplete/Unclear ☐ Drill Holes ☐		Power Loss/Surge ☐ Folio/Program ☐ Grain ☐ Weld ☐ Wrong Stock Pulled ☐ Out of Sequence ☐ Off-set ☐ Misabeled ☐ Fit/Function ☐ Misaligned/off center ☐ Positioned Wrong ☐ Outside Dimensions ☐ Over/Under tolerance ☐ Part Incorrect ☐ Part Lost/Missing ☐ Part Moved ☐ Drawing ☐ Finish ☐ Misread ☐ Turning Sequence ☐					
		OTHER : _____							

Work Order ID 136261

Friday, August 28, 2015 2:17:53 PM

136261

Page 3

Item ID: D2938-1

Accept

N900040100

Setup Start

NS1

Revision ID:

Stop

NS2

Item Name: Saddle LH Out, 206

Start Date: 8/28/2015 Start Qty: 6.00

6

Cust Item ID:

Required Date: 8/28/2015 Req'd Qty: 6.00

6

Customer:

Reference:

Approvals:

Process Plan: _____

Date: _____

Tooling: _____

Date: _____

Run Start

NR1

QC: _____

Date: _____

SPC (Y/N): _____

Date: _____

Stop

NR2Sequence ID/
Work Center IDOperation
DescriptionSet Up/
Run Hours

Tool ID

Tool #

Plan
CodeAccept
QtyReject
QtyReject
NumberInsp.
Stamp

160

QC3- Inspect Part Finish

0.00

160

QC

Memo

0.00

Quality Control

(6)

DAS
38
9-89

OCT 03 2015

170

Identify as per dwg & Stock Location

0.00

170

Packaging

Memo

0.00

Packaging

6

DAS
27
9-89

OCT 06 2015

180

QC21- Final Inspection - Work Order Release

0.00

180

QC

Memo

0.01

Quality Control

MCS

OCT 06 2015

MCS

OCT 06 2015

DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____		DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐		AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐					
Date :		Step #:		QTY Effective :			MRB (QS1042) Approval		
Description Work Order Deviation				Disposition				Completed By	
								Lead hand / Supervisor Approval Verification	
								QC / QA Coordinator Approval	
Root Cause		FAULT CATEGORY							
Environment ☐	No Re-verification ☐	Pressure/Forced ☐	Temperature/Cure ☐	Power Loss/Surge ☐	Positioned Wrong ☐				
Design ☐	Operator ☐	Bending ☐	Set-up ☐	Folio/Program ☐	Outside Dimensions ☐				
Doc/Data ☐	Offset/Setup ☐	Centre Not Concentric ☐	BOM/Route ☐	Grain ☐	Over/Under tolerance ☐				
Equip/Tooling ☐	Supplier ☐	Cracks ☐	Broken/Damage/Defect ☐	Weld ☐	Part Incorrect ☐				
Handling/Pre ☐	Training ☐	Crimp/Kink/Ripple/Wave ☐	Inspection Incomplete/Unqualified ☐	Wrong Stock Pulled ☐	Part Lost/Missing ☐				
Material ☐	Use for Testing ☐	Cuffs ☐	Contamination ☐	Out of Sequence ☐	Part Moved ☐				
Internal Transport ☐	Poor Information ☐	Crushing ☐	Countersink ☐	Off-set ☐	Drawing ☐				
Tribal Knowledge ☐	Rushing ☐	Heat Treat ☐	Cut Too Short ☐	Mislabeled ☐	Finish ☐				
LOA ☐	Product Improvement ☐	Wave/Twist in Tube ☐	Instructions Incomplete/Unclear ☐	Fit/Function ☐	Misread ☐				
Substation ☐	Process Improvement ☐	Marks/Chatter ☐	Drill Holes ☐	Misaligned/off center ☐	Turning Sequence ☐				
Past Expiry Date ☐	Manufacturing Process ☐	OTHER : _____							
Misidentified ☐	Past Due ☐								

Picklist Print

Friday, August 28, 2015 1:49:51 PM

Page 1

Work Order ID: 136261

136261

Parent Item: D2938-1

D2938-1

Parent Item Name: Saddle LH Out, 206

Start Date: 8/28/2015

Required Date: 8/28/2015

Start Qty: 6.00

Required Qty: 6.00

Comments: IPP: B 00.06.26 New DWG rev (mpp 2069)EC
IPP Rev:C As per Rev C 07-03-19 JLM

Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Qty per Kit	Total Qty	Qty Issued	Date Issued	Status
---------------------------------	------------------------	---------------	-------------	---------------------	------------------	-----------------	--------------------	----------------	-------------	--------------	---------------	----------------	--------

D6101-003 /		Manufactured	No			100	Each	25.0000	1	6			DAS
D6101-003									**	6			20
Saddle Billet, 7075													9-89 15-09-16

Location

Loc Qty

Loc Code

MAT045

25

132646

1

134038

24

6

DQA: _____ Date: _____



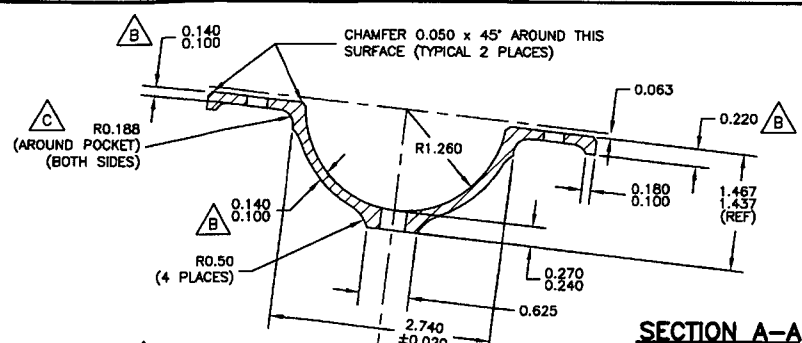
WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

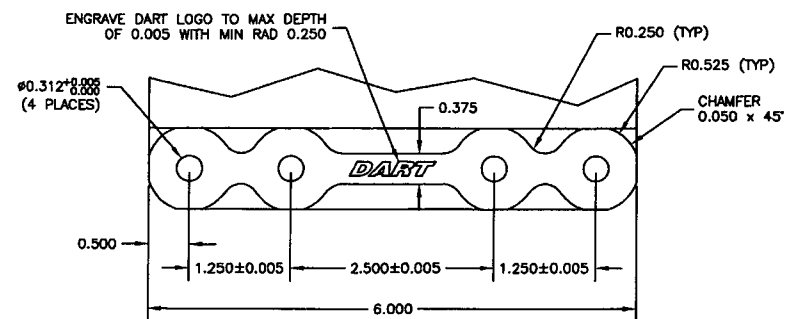
Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____		DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐		AGAINST DEPARTMENT/PROCESS <table style="width:100%; border: none;"> <tr> <td style="border: none;">Skid-tube ☐</td> <td style="border: none;">Cross tube ☐</td> <td style="border: none;">Water Jet ☐</td> <td style="border: none;">Engineering ☐</td> </tr> <tr> <td style="border: none;">Machining ☐</td> <td style="border: none;">Small Fab ☐</td> <td style="border: none;">Prod. Eng. Coord. ☐</td> <td style="border: none;">Quality ☐</td> </tr> <tr> <td style="border: none;">Thermoforming ☐</td> <td style="border: none;">Finishing ☐</td> <td style="border: none;">Rec/Store/Packaging ☐</td> <td style="border: none;">Other ☐</td> </tr> <tr> <td style="border: none;">Large Fab ☐</td> <td style="border: none;">Composite ☐</td> <td style="border: none;">Supplier ☐</td> <td></td> </tr> </table>						Skid-tube ☐	Cross tube ☐	Water Jet ☐	Engineering ☐	Machining ☐	Small Fab ☐	Prod. Eng. Coord. ☐	Quality ☐	Thermoforming ☐	Finishing ☐	Rec/Store/Packaging ☐	Other ☐	Large Fab ☐	Composite ☐	Supplier ☐	
Skid-tube ☐	Cross tube ☐	Water Jet ☐	Engineering ☐																						
Machining ☐	Small Fab ☐	Prod. Eng. Coord. ☐	Quality ☐																						
Thermoforming ☐	Finishing ☐	Rec/Store/Packaging ☐	Other ☐																						
Large Fab ☐	Composite ☐	Supplier ☐																							
Date :		Step #:		QTY Effective :			MRB (QSI042) Approval																		
Description Work Order Deviation				Disposition			Completed By																		
Root Cause		FAULT CATEGORY																							
Environment ☐ Design ☐ Doc/Data ☐ Equip/Tooling ☐ Handling/Pre ☐ Material ☐ Internal Transport ☐ Tribal Knowledge ☐ LOA ☐ Substation ☐ Past Expiry Date ☐ Misidentified ☐	No Re-verification ☐ Operator ☐ Offset/Setup ☐ Supplier ☐ Training ☐ Use for Testing ☐ Poor Information ☐ Rushing ☐ Product Improvement ☐ Process Improvement ☐ Manufacturing Process ☐ Past Due ☐	Pressure/Forced ☐ Bending ☐ Centre Not Concentric ☐ Cracks ☐ Crimp/Kink/Ripple/Wave ☐ Cuffs ☐ Crushing ☐ Heat Treat ☐ Wave/Twist in Tube ☐ Marks/Chatter ☐	Temperature/Cure ☐ Set-up ☐ BOM/Route ☐ Broken/Damage/Defect ☐ Inspection Incomplete/Unqualified ☐ Contamination ☐ Countersink ☐ Cut Too Short ☐ Instructions Incomplete/Unclear ☐ Drill Holes ☐	Power Loss/Surge ☐ Folio/Program ☐ Grain ☐ Weld ☐ Wrong Stock Pulled ☐ Out of Sequence ☐ Off-set ☐ Misabeled ☐ Fit/Function ☐ Misaligned/off center ☐	Positioned Wrong ☐ Outside Dimensions ☐ Over/Under tolerance ☐ Part Incorrect ☐ Part Lost/Missing ☐ Part Moved ☐ Drawing ☐ Finish ☐ Misread ☐ Turning Sequence ☐		OTHER : ☐																		

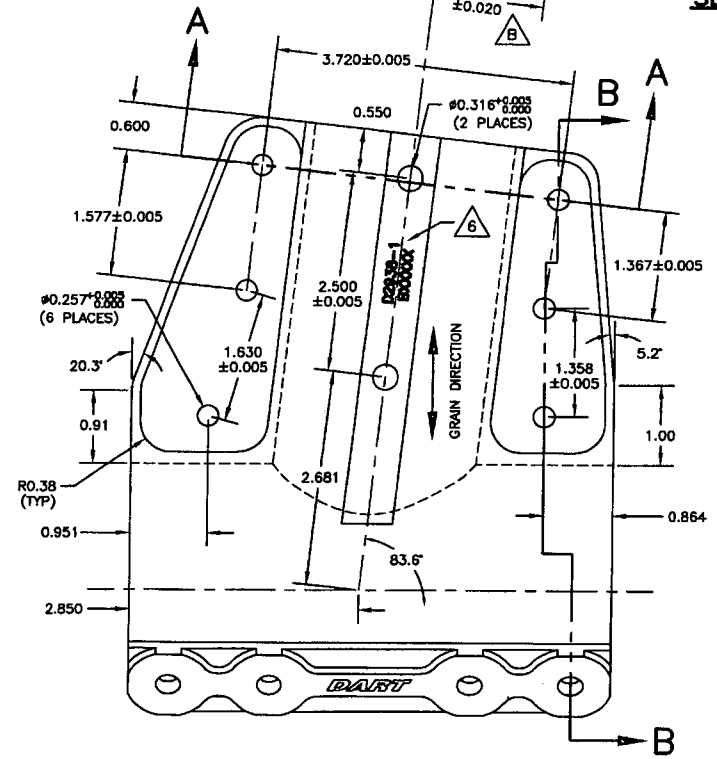
136261
 54 20150901



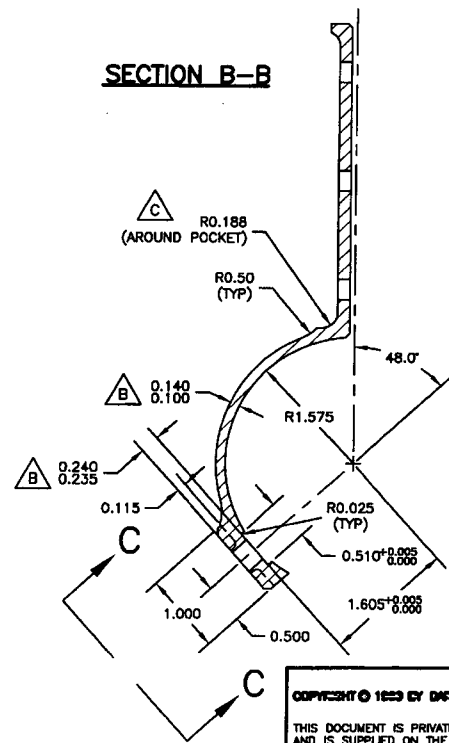
SECTION A-A



VIEW C-C



SECTION B-B



D2938-1 LH SADDLE (SHOWN)
 D2938-2 RH SADDLE (OPPOSITE)

- NOTES:
- 1) MATERIAL: ALUMINUM 7075-T7351 (QQ-A-250/12)
 (MAKE FROM D6101-003 SADDLE BILLET, 7075)
 - 2) FINISH: CHEMICAL CONVERSION COAT PER DART QSI 005 4.1
 POWDER COAT GLOSS WHITE (REF 4.3.5.1) PER DART QSI 005 4.3
 - 3) BREAK ALL SHARP EDGES 0.010 TO 0.020
 - 4) TOLERANCES ARE PER DART QSI 018 UNLESS OTHERWISE NOTED
 - 5) ALL DIMENSIONS ARE IN INCHES
 - 6) ENGRAVE PART AND BATCH NUMBER IN THIS AREA 0.010 TO 0.015 DEEP

C	06.11.09	R0.188 WAS R0.30 TO R0.25
B	00.05.29	CHANGED GEOMETRY AND MATERIAL
A	99.11.12	NEW ISSUE
DESIGN	4	DRAWN BY C.B.
CHECKED	PH	APPROVED
DATE	06.11.09	
DRAWING NO.	D2938	
TITLE	SADDLE OUTSIDE	
REV. C		
SHEET 1 OF 1		
SCALE		
2:3		

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07.02.12

DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____		DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐		AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐					
Date :		Step #:		QTY Effective :			MRB (QSI042) Approval		
Description Work Order Deviation				Disposition				Completed By	
								Lead hand / Supervisor Approval Verification	
								QC / QA Coordinator Approval	
Root Cause		FAULT CATEGORY							
Environment ☐	No Re-verification ☐	Pressure/Forced ☐	Temperature/Cure ☐	Power Loss/Surge ☐	Positioned Wrong ☐				
Design ☐	Operator ☐	Bending ☐	Set-up ☐	Folio/Program ☐	Outside Dimensions ☐				
Doc/Data ☐	Offset/Setup ☐	Centre Not Concentric ☐	BOM/Route ☐	Grain ☐	Over/Under tolerance ☐				
Equip/Tooling ☐	Supplier ☐	Cracks ☐	Broken/Damage/Defect ☐	Weld ☐	Part Incorrect ☐				
Handling/Pre ☐	Training ☐	Crimp/Kink/Ripple/Wave ☐	Inspection Incomplete/Unqualified ☐	Wrong Stock Pulled ☐	Part Lost/Missing ☐				
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Tribal Knowledge ☐	Rushing ☐	Heat Treat ☐	Cut Too Short ☐	Mislabeled ☐	Finish ☐				
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Substation ☐	Process Improvement ☐	Marks/Chatter ☐	Drill Holes ☐	Misaligned/off center ☐	Turning Sequence ☐				
Past Expiry Date ☐	Manufacturing Process ☐	OTHER : _____							
Misidentified ☐	Past Due ☐								

DART AEROSPACE LTD	Work Order: 136261
Description: 206 Saddle, Outboard, Left side	Part Number: D2938-1
Inspection Dwg: D2938 Rev. C	Page 1 of 1

Inspect dimensions highlighted on inspection sheet drawing D2938 Rev. C and record below:

Dim	Min	Max	Go/No Go Gauge	Recorded Actual Dimensions				By	Date
				1	2	3	4		
A	0.100	0.140		.127	.126	.127	.128		
B	0.100	0.140		.125	.125	.125	.126		
C	0.100	0.140		.112	.109	.110	.112		
D	0.210	0.230		.219	.221	.218	.218		
E	1.245	1.255		1.250	1.250	1.250	1.250		
F	1.245	1.255		1.250	1.250	1.250	1.250		
G	2.495	2.505		2.500	2.500	2.500	2.500		
H	0.510	0.515		.513	.513	.512	.512		
I	1.572	1.582		1.577	1.577	1.577	1.577		
J	2.495	2.505		2.500	2.500	2.500	2.500		
K	0.257	0.262		.257	.257	.257	.257		
L	0.312	0.317		.313	.313	.313	.313		
M	0.235	0.240		.239	.239	.239	.239		
N	0.100	0.140		.122	.122	.119	.120		
O	0.540	0.560		.548	.548	.547	.547		
P	0.490	0.510		.498	.499	.497	.498		
Q	3.715	3.725		3.720	3.720	3.720	3.720		
R	2.720	2.760		2.740	2.740	2.740	2.740		
S	0.240	0.270		.249	.248	.249	.249		
T	0.100	0.180		.138	.136	.135	.130		
U	1.625	1.635		1.630	1.630	1.630	1.630		
V	1.362	1.372		1.367	1.367	1.367	1.367		
W	0.316	0.321		.316	.316	.316	.316		
X	1.250	1.270		1.2575	1.260	1.258	1.2585		
Y	1.565	1.585		1.5722	1.575	1.573	1.573		
Z	0.178	0.198		.188	.188	.188	.188		
AA									
AB									
AC									
AD									
AE									
AF									
AG									
AH									
Accept/Reject									

Measured by: <i>ML</i>
Date: 15/09/21

Audited by: <i>B.A</i>	DAS
Date: 15/10/01	08 9-89

Rev	Date	Change	Revised by	Approved
A		New Issue	RF	
B	02.12.12	Reformat; Added Dim. X-Y, DT8683, DT8686, DT8690	KJ/RF	
C	07.03.21	Revised per drawing revision C	KJ/JLM	<i>[Signature]</i>

DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____		DISPOSITION Rework ☐ Skid-tube ☐ Cross tube ☐ Water Jet ☐ Engineering ☐ Scrap ☐ Machining ☐ Small Fab ☐ Prod. Eng. Coord. ☐ Quality ☐ Use-as-is ☐ Thermoforming ☐ Finishing ☐ Rec/Store/Packaging ☐ Other ☐ Suspected Unapproved ☐		AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Cross tube ☐ Water Jet ☐ Engineering ☐ Machining ☐ Small Fab ☐ Prod. Eng. Coord. ☐ Quality ☐ Thermoforming ☐ Finishing ☐ Rec/Store/Packaging ☐ Other ☐ Large Fab ☐ Composite ☐ Supplier ☐					
Date :		Step #:		QTY Effective :			MRB (QS1042) Approval		
Description Work Order Deviation				Disposition				Completed By	
								Lead hand / Supervisor Approval Verification	
								QC / QA Coordinator Approval	
Root Cause Environment ☐ Design ☐ Doc/Data ☐ Equip/Tooling ☐ Handling/Pre ☐ Material ☐ Internal Transport ☐ Tribal Knowledge ☐ LOA ☐ Substation ☐ Past Expiry Date ☐ Misidentified ☐ No Re-verification ☐ Operator ☐ Offset/Setup ☐ Supplier ☐ Training ☐ Use for Testing ☐ Poor Information ☐ Rushing ☐ Product Improvement ☐ Process Improvement ☐ Manufacturing Process ☐ Past Due ☐		FAULT CATEGORY Pressure/Forced ☐ Bending ☐ Centre Not Concentric ☐ Cracks ☐ Crimp/Kink/Ripple/Wave ☐ Cuffs ☐ Crushing ☐ Heat Treat ☐ Wave/Twist in Tube ☐ Marks/Chatter ☐ Temperature/Cure ☐ Set-up ☐ BOM/Route ☐ Broken/Damage/Defect ☐ Inspection Incomplete/Unqualified ☐ Contamination ☐ Countersink ☐ Cut Too Short ☐ Instructions Incomplete/Unclear ☐ Drill Holes ☐ Power Loss/Surge ☐ Folio/Program ☐ Grain ☐ Weld ☐ Wrong Stock Pulled ☐ Out of Sequence ☐ Off-set ☐ Misabeled ☐ Fit/Function ☐ Misaligned/off center ☐ Positioned Wrong ☐ Outside Dimensions ☐ Over/Under tolerance ☐ Part Incorrect ☐ Part Lost/Missing ☐ Part Moved ☐ Drawing ☐ Finish ☐ Misread ☐ Turning Sequence ☐							
OTHER :									

DART AEROSPACE LTD		Work Order:	136261
Description: 206 Saddle, Outboard, Left side		Part Number:	D2938-1
Inspection Dwg: D2938 Rev. C		Page 1 of 1	

Inspect dimensions highlighted on inspection sheet drawing D2938 Rev. C and record below:

Dim	Min	Max	Go/No Go Gauge	Recorded Actual Dimensions				By	Date
				#5	#6	3	4		
A	0.100	0.140		.128	.128				
B	0.100	0.140		.125	.125				
C	0.100	0.140		.113	.113				
D	0.210	0.230		.220	.219				
E	1.245	1.255		1.250	1.250				
F	1.245	1.255		1.250	1.250				
G	2.495	2.505		2.500	2.500				
H	0.510	0.515		.512	.512				
I	1.572	1.582		1.577	1.577				
J	2.495	2.505		2.500	2.500				
K	0.257	0.262		.257	.257				
L	0.312	0.317		.313	.313				
M	0.235	0.240		.239	.238				
N	0.100	0.140		.120	.120				
O	0.540	0.560		.546	.547				
P	0.490	0.510		.498	.498				
Q	3.715	3.725		3.720	3.720				
R	2.720	2.760		2.740	2.740				
S	0.240	0.270		.249	.249				
T	0.100	0.180		.135	.135				
U	1.625	1.635		1.630	1.630				
V	1.362	1.372		1.367	1.367				
W	0.316	0.321		.316	.316				
X	1.250	1.270		1.2585	1.258				
Y	1.565	1.585		1.573	1.573				
Z	0.178	0.198		.188	.188				
AA									
AB									
AC									
AD									
AE									
AF									
AG									
AH									
Accept/Reject									

Measured by:	14
Date:	15/09/21

Audited by:	H.C.	DAS
Date:	15/10/01	08
		9-89

Rev	Date	Change	Revised by	Approved
A		New Issue	RF	
B	02.12.12	Reformat; Added Dim. X-Y, DT8683, DT8686, DT8690	KJ/RF	
C	07.03.21	Revised per drawing revision C	KJ/JLM	

DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____		DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐		AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐					
Date :		Step #:		QTY Effective :			MRB (QSI042) Approval		
Description Work Order Deviation				Disposition				Completed By	
								Lead hand / Supervisor Approval Verification	
								QC / QA Coordinator Approval	
Root Cause		FAULT CATEGORY							
Environment ☐	No Re-verification ☐	Pressure/Forced ☐	Temperature/Cure ☐	Power Loss/Surge ☐	Positioned Wrong ☐				
Design ☐	Operator ☐	Bending ☐	Set-up ☐	Folio/Program ☐	Outside Dimensions ☐				
Doc/Data ☐	Offset/Setup ☐	Centre Not Concentric ☐	BOM/Route ☐	Grain ☐	Over/Under tolerance ☐				
Equip/Tooling ☐	Supplier ☐	Cracks ☐	Broken/Damage/Defect ☐	Weld ☐	Part Incorrect ☐				
Handling/Pre ☐	Training ☐	Crimp/Kink/Ripple/Wave ☐	Inspection Incomplete/Unqualified ☐	Wrong Stock Pulled ☐	Part Lost/Missing ☐				
Material ☐	Use for Testing ☐	Cuffs ☐	Contamination ☐	Out of Sequence ☐	Part Moved ☐				
Internal Transport ☐	Poor Information ☐	Crushing ☐	Countersink ☐	Off-set ☐	Drawing ☐				
Tribal Knowledge ☐	Rushing ☐	Heat Treat ☐	Cut Too Short ☐	Mislabeled ☐	Finish ☐				
LOA ☐	Product Improvement ☐	Wave/Twist in Tube ☐	Instructions Incomplete/Unclear ☐	Fit/Function ☐	Misread ☐				
Substation ☐	Process Improvement ☐	Marks/Chatter ☐	Drill Holes ☐	Misaligned/off center ☐	Turning Sequence ☐				
Past Expiry Date ☐	Manufacturing Process ☐	OTHER : _____							
Misidentified ☐	Past Due ☐								



Part Number: D2938-1	Rev: C	- Page 1 -
Description: SADDLE OUTSIDE	Inspection Dwg: D2938	Work Order: 136261

Item Ref.	Nominal	Tolerance	No. Piece_1 Actual	No. Piece_2 Actual	No. Piece_3 Actual	No. Piece_4 Actual	
1	1.260	+0.010/-0.010	1.250	1.250	1.250	1.250	
2	0.063	+0.010/-0.010	0.056	0.053	0.055	0.054	
3	0.220	+0.010/-0.010	0.220	0.222	0.221	0.220	
4	1.452	+0.015/-0.015	1.447	1.450	1.448	1.448	
5	0.120	+0.020/-0.020	0.120	0.123	0.121	0.121	
6	0.312	+0.005/0.000	0.312	0.312	0.312	0.312	
7	0.500	+0.010/-0.010	0.501	0.500	0.503	0.501	
8	1.250	+0.005/-0.005	1.250	1.250	1.249	1.250	
9	2.500	+0.005/-0.005	2.500	2.499	2.500	2.499	
10	1.250	+0.005/-0.005	1.249	1.249	1.249	1.250	
11	6.000	+0.010/-0.010	5.999	5.999	5.999	5.999	
12	0.063	+0.010/-0.010	0.068	0.064	0.067	0.066	
Ang13	48.000	+0.500/-0.500	47.710	47.854	47.794	47.845	
14	1.575	+0.010/-0.010	1.574	1.573	1.573	1.573	
15	1.605	+0.005/0.000	1.605	1.605	1.605	1.605	
16	0.500	+0.010/-0.010	0.507	0.508	0.505	0.506	
17	0.500	+0.010/-0.010	0.506	0.506	0.505	0.506	
18	0.115	+0.010/-0.010	0.115	0.116	0.115	0.116	
19	0.235	+0.005/0.000	0.240	0.239	0.239	0.239	
20	0.864	+0.010/-0.010	0.864	0.866	0.863	0.865	
21	5.200	+0.500/-0.500	5.221	5.218	5.218	5.212	
22	1.359	+0.005/-0.005	1.358	1.359	1.358	1.358	
23	1.367	+0.005/-0.005	1.367	1.367	1.368	1.368	
24	0.316	+0.005/0.000	0.316	0.316	0.316	0.316	
25	0.550	+0.010/-0.010	0.551	0.549	0.550	0.549	
26	3.720	+0.005/-0.005	3.719	3.719	3.719	3.719	
27	0.600	+0.010/-0.010	0.598	0.599	0.599	0.598	
28	1.577	+0.005/-0.005	1.578	1.578	1.578	1.577	
29	2.500	+0.005/-0.005	2.499	2.500	2.500	2.500	
30	0.257	+0.005/0.000	0.258	0.258	0.258	0.258	
31	1.630	+0.005/-0.005	1.629	1.630	1.630	1.629	

Measured by:
Mathieu Lamarche

Date:
2015-9-30

Audited by:

Date:



Part Number: D2938-1	Rev: C	- Page 2 -
Description: SADDLE OUTSIDE	Inspection Dwg: D2938	Work Order: 136261

Item Ref.	Nominal	Tolerance	No. Piece_1 Actual	No. Piece_2 Actual	No. Piece_3 Actual	No. Piece_4 Actual	
32	20.300	+0.500/-0.500	20.289	20.283	20.282	20.289	
33	0.951	+0.010/-0.010	0.951	0.950	0.952	0.950	
34	2.850	+0.010/-0.010	2.850	2.850	2.850	2.850	
35	2.681	+0.010/-0.010	2.680	2.680	2.680	2.680	
36	83.600	+0.500/-0.500	83.577	83.578	83.573	83.573	
D37	0.375	+0.010/-0.010	0.377	0.377	0.377	0.377	
D38	0.050	+0.010/-0.010	0.040	0.040	0.040	0.040	
D39	0.188	+0.010/-0.010	0.188	0.188	0.188	0.188	
D40	0.120	+0.020/-0.020	0.112	0.112	0.110	0.112	
D41	0.510	+0.005/0.000	0.512	0.512	0.512	0.512	
D42	0.050	+0.010/-0.010	0.042	0.046	0.046	0.045	
D43	0.120	+0.020/-0.020	0.125	0.124	0.125	0.125	
D44	0.140	+0.040/-0.040	0.140	0.140	0.140	0.140	
D45	0.255	+0.015/-0.015	0.250	0.248	0.249	0.249	
D46	0.625	+0.010/-0.010	0.635	0.635	0.635	0.635	
D47	2.740	+0.020/-0.020	2.740	2.740	2.740	2.740	
D48	0.120	+0.020/-0.020	0.124	0.127	0.126	0.129	

Measured by:
Mathieu Lamarche

Date:
2015-9-30

Audited by:

Date:



Part Number: D2938-1	Rev: C	- Page 1 -
Description: SADDLE OUTSIDE	Inspection Dwg: D2938	Work Order: 136261

Item Ref.	Nominal	Tolerance	No. Piece_5 Actual	No. Piece_6 Actual			
1	1.260	+0.010/-0.010	1.250	1.250			
2	0.063	+0.010/-0.010	0.054	0.055			
3	0.220	+0.010/-0.010	0.220	0.222			
4	1.452	+0.015/-0.015	1.448	1.448			
5	0.120	+0.020/-0.020	0.121	0.121			
6	0.312	+0.005/0.000	0.312	0.312			
7	0.500	+0.010/-0.010	0.499	0.499			
8	1.250	+0.005/-0.005	1.250	1.249			
9	2.500	+0.005/-0.005	2.499	2.500			
10	1.250	+0.005/-0.005	1.249	1.249			
11	6.000	+0.010/-0.010	5.999	5.999			
12	0.063	+0.010/-0.010	0.065	0.066			
Ang13	48.000	+0.500/-0.500	47.844	47.839			
14	1.575	+0.010/-0.010	1.573	1.573			
15	1.605	+0.005/0.000	1.605	1.605			
16	0.500	+0.010/-0.010	0.506	0.505			
17	0.500	+0.010/-0.010	0.507	0.505			
18	0.115	+0.010/-0.010	0.117	0.115			
19	0.235	+0.005/0.000	0.239	0.238			
20	0.864	+0.010/-0.010	0.868	0.866			
21	5.200	+0.500/-0.500	5.214	5.219			
22	1.359	+0.005/-0.005	1.359	1.358			
23	1.367	+0.005/-0.005	1.367	1.368			
24	0.316	+0.005/0.000	0.316	0.316			
25	0.550	+0.010/-0.010	0.550	0.550			
26	3.720	+0.005/-0.005	3.719	3.718			
27	0.600	+0.010/-0.010	0.599	0.596			
28	1.577	+0.005/-0.005	1.577	1.578			
29	2.500	+0.005/-0.005	2.499	2.498			
30	0.257	+0.005/0.000	0.258	0.258			
31	1.630	+0.005/-0.005	1.630	1.629			

Measured by: Mathieu Lamarche
Date: 2015-9-30

Audited by:
Date:



Part Number:
D2938-1

Rev:
C

- Page 2 -

Description:
SADDLE OUTSIDE

Inspection Dwg:
D2938

Work Order:
136261

Item Ref.	Nominal	Tolerance	No. Piece_5 Actual	No. Piece_6 Actual			
32	20.300	+0.500/-0.500	20.280	20.274			
33	0.951	+0.010/-0.010	0.949	0.949			
34	2.850	+0.010/-0.010	2.850	2.850			
35	2.681	+0.010/-0.010	2.681	2.682			
36	83.600	+0.500/-0.500	83.580	83.580			
D37	0.375	+0.010/-0.010	0.377	0.377			
D38	0.050	+0.010/-0.010	0.040	0.040			
D39	0.188	+0.010/-0.010	0.188	0.188			
D40	0.120	+0.020/-0.020	0.114	0.113			
D41	0.510	+0.005/0.000	0.512	0.512			
D42	0.050	+0.010/-0.010	0.046	0.050			
D43	0.120	+0.020/-0.020	0.123	0.125			
D44	0.140	+0.040/-0.040	0.140	0.140			
D45	0.255	+0.015/-0.015	0.249	0.250			
D46	0.625	+0.010/-0.010	0.635	0.635			
D47	2.740	+0.020/-0.020	2.740	2.740			
D48	0.120	+0.020/-0.020	0.127	0.127			

Measured by:
Mathieu Lamarche

Date:
2015-9-30

Audited by:

Date: